



**NAVAL
POSTGRADUATE
SCHOOL**

MONTEREY, CALIFORNIA

JOINT APPLIED PROJECT

**ANALYSIS OF THE UNITED STATES
DEFENSE AND CIVILIAN CONTRACTING
WORKFORCE'S TRAINING ON
PROCUREMENT FRAUD, WASTE AND
ABUSE**

**By: Elisban Rodriguez,
September 2013**

Advisors: Max V. Kidalov, and
Rhonda F. Labron

Approved for public release; distribution is unlimited

THIS PAGE INTENTIONALLY LEFT BLANK

REPORT DOCUMENTATION PAGE
Form Approved OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington DC 20503.

1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE September 2013	3. REPORT TYPE AND DATES COVERED Joint Applied Project
4. TITLE AND SUBTITLE ANALYSIS OF THE UNITED STATES DEFENSE AND CIVILIAN CONTRACTING WORKFORCE'S TRAINING ON PROCUREMENT FRAUD, WASTE AND ABUSE		5. FUNDING NUMBERS
6. AUTHOR(S) Elisban Rodriguez		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000		8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING /MONITORING AGENCY NAME(S) AND ADDRESS(ES) N/A		10. SPONSORING/MONITORING AGENCY REPORT NUMBER

11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. government. IRB protocol number ____N/A____.

12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited	12b. DISTRIBUTION CODE A
---	------------------------------------

13. ABSTRACT (maximum 200 words)

The objective of this project is to examine the current state of training of the contracting community on procurement fraud, waste and abuse (FW&A). This project also examines the need and practical aspects of implementation for a contracting course on procurement FW&A into the procurement certification process. This research will look into the benefits of having a course implemented into the certification process as well as the feasibility of doing so. The expected product of this research is to provide a research paper that would enlighten the contracting community with greater insight to promote having a procurement FW&A course be part of the certification process. This would mean the incorporation of this course into the curriculum for Federal Acquisition Certification-Contracting and Defense Acquisition Workforce Improvement Act certification. The end goal of this research is to examine an alternative method that can assist in the reduction of FW&A and change the contracting profession as a whole on how it deals with FW&A. As a result of this project, the contracting community and profession will have a better understanding if implementing a procurement FW&A course is something feasible and executable.

14. SUBJECT TERMS Fraud, waste, abuse, FW&A, training, FAC-C, procurement, contracting specialist, certification,		15. NUMBER OF PAGES 71	
16. PRICE CODE			
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UU

THIS PAGE INTENTIONALLY LEFT BLANK

Approved for public release; distribution is unlimited

**ANALYSIS OF THE UNITED STATES DEFENSE AND CIVILIAN
CONTRACTING WORKFORCE'S TRAINING ON PROCUREMENT
FRAUD, WASTE AND ABUSE**

Elisban Rodriguez, Civilian, National Aeronautics and Space Administration

Submitted in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE IN CONTRACT MANAGEMENT

from the

NAVAL POSTGRADUATE SCHOOL
September 2013

Authors: _____
Elisban Rodriguez

Approved by: _____
Max V. Kidalov, J.D., Lead Advisor

Rhonda F. Labron, Support Advisor

William R. Gates, Dean
Graduate School of Business and Public Policy

THIS PAGE INTENTIONALLY LEFT BLANK

ANALYSIS OF THE UNITED STATES DEFENSE AND CIVILIAN CONTRACTING WORKFORCE'S TRAINING ON PROCUREMENT FRAUD, WASTE AND ABUSE

ABSTRACT

The objective of this project is to examine the current state of training of the contracting community on procurement fraud, waste and abuse (FW&A). This project also examines the need and practical aspects of implementation for a contracting course on procurement FW&A into the procurement certification process. This research will look into the benefits of having a course implemented into the certification process as well as the feasibility of doing so. The expected product of this research is to provide a research paper that would enlighten the contracting community with greater insight to promote having a procurement FW&A course be part of the certification process. This would mean the incorporation of this course into the curriculum for Federal Acquisition Certification-Contracting and Defense Acquisition Workforce Improvement Act certification. The end goal of this research is to examine an alternative method that can assist in the reduction of FW&A and change the contracting profession as a whole on how it deals with FW&A. As a result of this project, the contracting community and profession will have a better understanding if implementing a procurement FW&A course is something feasible and executable.

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

I.	INTRODUCTION.....	1
	A. BACKGROUND	1
	B. PURPOSE.....	4
	C. RESEARCH QUESTIONS	4
	D. SCOPE	4
	E. LIMITATIONS AND ASSUMPTIONS	4
	F. RESEARCH METHODOLOGY	5
	G. ORGANIZATION OF THE REPORT.....	6
II.	CURRENT STATE OF CONTRACTING.....	9
	A. YODER'S THREE INTEGRATIVE PILLARS OF SUCCESS©	10
	B. AUTHORIZATION AND APPROPRIATION INCREASE IN GOVERNMENT CONTRACTS.....	11
	C. PERSONNEL—FEDERAL ACQUISITION WORKFORCE	12
	1. Contracting Attrition Trends.....	18
	2. Hiring	19
	D. PLATFORM.....	20
	E. PROTOCOL—CONTRACT MANAGEMENT AND OVERSIGHT.....	20
	F. SUCCESSFUL ORGANIZATION	21
	G. SUMMARY	22
III.	IS PROCUREMENT FW&A A SYMPTOM OF IMMATURE CONTRACTING?	23
IV.	STRUCTURE AND TRAINING REQUIREMENTS FOR FEDERAL CONTRACTING PERSONNEL CERTIFICATION.....	27
	A. HOW CIVILIAN AGENCIES AND DOD ARE STRUCTURED REGARDING PROFESSIONAL CERTIFICATION OF THEIR CONTRACTING WORKFORCE	27
	B. TRAINING REQUIREMENTS FOR FAC-C CERTIFICATIONS	28
	C. TRAINING REQUIREMENTS FOR DAWIA CERTIFICATIONS.....	30
	D. COMPARISON OF TRAINING REQUIREMENTS BETWEEN FAC-C AND DAWIA	32
	E. SUMMARY	35
V.	NEED FOR A PROCUREMENT FW&A COURSE.....	37
	A. LACK OF A PROCUREMENT FW&A COURSE AS PART OF DAWIA AND FAC-C CERTIFICATION.....	38
	B. BENEFITS OF HAVING A COURSE IMPLEMENTED INTO CERTIFICATION PROCESS	40
	C. SUMMARY	41
VI.	CURRENT PROCUREMENT FRAUD, WASTE AND ABUSE TRAINING	43
	A. CURRENT TRAINING AVAILABLE.....	43
	B. SUMMARY	44

VII. FEASIBILITY OF IMPLEMENTING A PROCUREMENT FRAUD, WASTE, AND ABUSE COURSE	45
A. BARRIERS FOR IMPLEMENTATION	45
B. EASE OF IMPLEMENTATION	46
C. SUMMARY	46
VIII. CONCLUSION AND RECOMMENDATION	47
A. CONCLUSION	47
1. ANSWER TO RESEARCH QUESTIONS.....	47
B. RECOMMENDATION.....	48
LIST OF REFERENCES	49
INITIAL DISTRIBUTION LIST	53

LIST OF FIGURES

Figure 1.	Three Integrative Pillars of Success© (From Yoder, 2013, p. 16)	11
Figure 2.	Growth in Government Contract Spending (From OMB, 2011, p. 1).....	12
Figure 3.	Contractor Personnel as Percentage of DoD Workforce in Recent Operations (From Swartz & Church, 2013, p. 2).....	13
Figure 4.	Federal Acquisition Workforce (From FAI, 2013b, p. 2).....	17

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF TABLES

Table 1.	Contractor Personnel and Troop Level in Afghanistan (From Schwartz and Church, 2013, p. 23)	15
Table 2.	Contractor Personnel and Troop Level in Iraq (From Schwartz & Church, 2013, p. 25)	16
Table 3.	Attritions from Select 1100 Series Occupations (From FAI, 2013b, p. 10)	18
Table 4.	Attritions through Retirements from Select 1100 Series Occupations (From FAI, 2013b, p. 10).....	19
Table 5.	New Hires into the 1100 Occupational Series (From FAI, 2013b, p. 12)	19
Table 6.	FAC-C Certification Requirements (From FAI, 2013a).....	30
Table 7.	Level I Certification Comparison between FAC-C and DAWIA (After Defense Acquisition University [DAU], 2013; FAI, 2013a)	33
Table 8.	Level II Certification Comparison between FAC-C and DAWIA (After DAU, 2013; FAI, 2013a)	34
Table 9.	Level III Certification Comparison between FAC-C and DAWIA (After DAU, 2013; FAI, 2013a)	35

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF ACRONYMS AND ABBREVIATIONS

AFGE	American Federation of Government Employees
ACFE	Association of Certified Fraud Examiners
AIP	Acquisition Integrity Program
CAOC	Chief Acquisition Officers Council
CMMM	Contract Management Maturity Model
COR	Contracting Officer Representative
CPSR	Contractor Purchasing System Review
CWC	Commission on Wartime Contracting
DAU	Defense Acquisition University
DAWIA	Defense Acquisition Workforce Improvement Act
DHS	Department of Homeland Security
DNI	Directorate of National Intelligence
DoD	Department of Defense
DoS	Department of State
EPLS	Excluded Parties List System
FAC-C	Federal Acquisition Certification-Contracting
FAC-COR	Federal Acquisition Certification-Contracting Officer Representative
FAI	Federal Acquisition Institute
FAR	Federal Acquisition Regulation
FPDS	Federal Procurement Data System
FW&A	Fraud Waste & Abuse
GAO	Government Accountability Office
GS	General Schedule
GSA	General Services Administration
GSBPP	Graduate School of Business and Public Policy
NASA	National Aeronautics Space Administration
NDAA	National Defense Authorization Act
NPS	Naval Postgraduate School

OIG	Office of the Inspector General
OMB	Office of Management and Budget
SAM	System for Award Management
SATERN	System for Administration, Training, and Educational Resources for NASA
TIPS	Three Integrative Pillars of Success©
U.S.	United States
USNORTHCOM	United States Northern Command

ACKNOWLEDGMENTS

I would like to acknowledge the outstanding support and expertise provided by my advisors, Professor Max V. Kidalov, J.D., and Rhonda Labron, as well as NPS classmate Jorge Rios for his initial contributions to this research.

I would also like to thank my life partner, Toby Hays, and my family for their continuous encouragement and support.

THIS PAGE INTENTIONALLY LEFT BLANK

I. INTRODUCTION

This chapter discusses the background, purpose, research questions, scope and limitations and assumptions, for the analysis of the United States Defense and Civilian contracting workforce's training on procurement fraud, waste, and abuse (FW&A). Research methodology and organization will also be discussed in this report.

A. BACKGROUND

There was a push after the end of the Cold War to make the government more efficient. This push to make the government more efficient resulted in a dramatic increase in government purchasing discretion, coupled with a corresponding reduction in both internal and external oversight of the process (Schooner, 2001, p. 672). “With approximately one out of every six dollars of Federal government spending awarded to contractors, it is imperative that contract actions result in the best value for the taxpayer” (Office of Management and Budget [OMB], 2011, p. 1).

More internal controls are needed to mitigate risk after reports like the one from Gansler that identified FW&A as a problem in contingency environments (Gansler, 2007, p. 1). More adequate control measures are needed to prevent FW&A, regardless of structural and defense manpower changes. These changes will be even more challenging to accomplish with declining resources as shown on the Federal Acquisition Institute (FAI) *FY 2011 Annual Report on the Federal Acquisition workforce* (Federal Acquisition Institute [FAI], 2013b, p. 10).

The fight against FW&A has been a constant battle for the government. “Today more than ever, the government must be responsible in how it spends taxpayer dollars, cutting waste and streamlining programs where it can” (OMB, 2011, p. 1). Adequate oversight is necessary to protect scarce financial resources. Requiring that the contract workforce receive additional training on procurement FW&A, as part of both the Federal Acquisition Certification-Contracting (FAC-C) and Defense Acquisition Workforce Improvement Act (DAWIA) certification is one approach to tackle this issue. This research will analyze the prospects of this proposed approach.

The United States (U.S.) domestic and foreign policy fundamentally changed after the September 11, 2001 terrorist attacks. The Department of Homeland Security (DHS), the Directorate of National Intelligence (DNI), and United States Northern Command (USNORTHCOM) were created as a result of the attacks. The purpose of the DHS is to protect the U.S. and its territories from domestic terrorist attacks against the continental U.S., and the purpose of the DNI is to better integrate and manage intelligence and analysis of data from approximately 16 intelligence agencies. USNORTHCOM was established in 2002 to deter, prevent and defeat threats and aggression aimed at the U.S., its territories and interests (United States Northern Command, n.d., para. 5). Numerous agencies became recipients of substantial budget increases in an effort to address national security issues.

The urgency to expedite contract actions, especially in contingency environments, combined with government contractors' inadequate and poor internal controls, has resulted in approximately \$60 billion of taxpayer dollars wasted due to FW&A (Larner, 2011, para. 1).

The contracting workforce has a key role in protecting our nation by "safeguarding the interest of the United States in its contractual relationships" (Federal Acquisition Regulation [FAR], 2013, ch.1.602-2). According to the FAR, "Contracting Officers are also responsible for ensuring performance of all necessary actions for effective contracting, ensuring compliance with the terms of the contract" (FAR, 2013, ch.1.602-2).

The U.S. spent \$698 billion in 2010, which was an 81 percent increase from the previous decade (Legum, 2011, para. 1). Civilian agencies' workforces either remained constant or encountered reductions despite the substantial growth in contract spending. On the other hand, in fiscal year 2009, the Secretary of Defense established a fund known as the Defense Acquisition Workforce Development Fund (DAWDF) for workforce improvements initiatives such as recruitment, training, and retention of acquisition personnel (Cornell, n.d., para 1).

Government personnel responsible for evaluating Contractor Purchasing System Reviews (CPSR) decreased from 70 in 2002 to 14 in 2009, while the number of contract transactions have increased by 326 percent since 2001 (Commission on Wartime Contracting [CWC], 2009, p. 7). To make matters even more complicated, sequestration is now a new concern for DoD and civilian agencies. Sequestration created an artificial environment that called for arbitrary cuts. The American Federation of Government Employees (AFGE) (n.d.) website describes *sequestration* as:

The automatic spending cuts required under the 2011 Budget Control Act. This required \$1.2 trillion in automatic cuts to mandatory and discretionary programs, to begin in 2013 if Congress failed to pass legislation that would reduce the nation's deficit by at least \$1.5 trillion during the next decade. (para.4)

In 2013, Army contracting personnel were furloughed as a result of the sequestration budget constraints. While it is still too soon for assessments to determine the results of its impact, a reasonable assumption is that the contracting workforce will be inclined to offset these actions by focusing less on contract oversight and risk opportunities for increased exposure to procurement FW&A. The reduction in support has created an environment where there is pressure to meet customer needs and ensure compliance to government regulations.

The government continues to battle a decline in its civilian contracting workforce, while at the same time trying to administer an increasing number of service contracts. Contract management has been identified by the GAO as being high risk since 1992 (Government Accountability Office [GAO], 2011, p. 2). The government is in need of mature professional training. The government would strengthen the contracting profession by integrating a procurement FW&A course into the core curriculum of the certification process. The implementation of a course would assist in the reduction of wasted government funds by having a better skilled workforce that could more adequately identify and deter FW&A. This training would serve as a form of self-regulation, which would be a middle ground between discretion and oversight. This research will not only focus on examining the benefits of having a course become part of

the certification process, but also look into the barriers and feasibility of implementing this course.

B. PURPOSE

The purpose of this project is to analyze the current and existing training requirements for procurement FW&A. This project's end goal is to increase professional maturity of contracting, by proposing an approach to tackle the current increase in procurement FW&A. By analyzing the current training available to the contracting community, this will deepen senior leadership's understanding of the need to implement a course that focuses primarily on procurement FW&A as a possible solution to minimizing procurement FW&A.

C. RESEARCH QUESTIONS

The primary objective of this research is to answer the following questions:

1. Should a procurement FW&A course be part of the mandatory training requirements for procurement certification to enable maturity of the profession?
2. What are the benefits of having a course implemented into the certification process?
3. What is the ease of implementation of adding a new mandatory FW&A course for FAC-C/DAWIA certification of contracting professionals?

D. SCOPE

The scope of this research project is limited to focusing on the procurement FW&A within the U.S. federal government. The scope of this project is also limited to the training provided through the Defense Acquisition University (DAU) and FAC-C approved training courses. This research project is intended to address procurement FW&A but the major focus is on the fraud aspect of FW&A.

E. LIMITATIONS AND ASSUMPTIONS

A limitation associated with this study is the ability to have visibility on different agencies' training on procurement FW&A. Access to training courses offered by different agencies was a limiting factor in this research. This research paper should still

provide a general idea of what training is currently out there. Another limitation is the ability to truly capture how much FW&A is occurring in the federal government. An attempt was made to capture the information for practicable means of assessing the extent and scope of FW&A.

One assumption that was used during this research is that all federal civilian agencies are currently using the FAC-C certification process, based on federal mandates. This should be the case for all federal civilian agencies, unless the certification process falls under DAWIA certification requirements.

For this research, I used resources that are readily available to the public. I did not conduct any personal interviews and relied on the information on the DAU website and NASA training site.

F. RESEARCH METHODOLOGY

In conducting my research I first focused on capturing information about the current state of the contracting workforce by accessing data from sources such as the *FY 2011 Annual Report on the Federal Acquisition Workforce*. This report presented the trends in the 1102 contracting career series throughout the years. The report also addressed current issues that have a profound effect on the contracting workforce such as regular attrition and retirements.

Information regarding federal spending as well as improper spending was retrieved from the Office of Management and Budget (OMB) and the NASA Office of the Inspector General (OIG). Contracting career field information was retrieved from both DoD and civilian agencies. Information from OIG reports, reports from the Commission on Wartime Contracting and OMB, were used to depict the current contracting state. Academic and professional literature was also used to analyze the current contracting state.

The DAU and Federal Acquisition Institute (FAI) websites were used to research the structure and training requirements for both DAWIA and FAC-C. The websites presented the fundamental structure of each of the developmental curricula, and identified

mandatory training courses and requirements, for each of the three tiered levels of certification.

When researching what available sources currently exist that provide procurement FW&A training, sources such as the websites for the Association of Certified Fraud Examiners (ACFE), DAU and NASA's System for Administration, Training, and Educational Resources for NASA (SATERN).

This research is primarily sourced from DoD and civilian agency training requirements, public access OIG and GAO reports, contract/procurement fraud articles, Department of Labor statistics, and internet research. Interviews or surveys were not used to conduct this research project.

G. ORGANIZATION OF THE REPORT

This report is organized into eight chapters. Chapter I consists of the Introduction chapter. This chapter addresses the background, purpose of the research, research questions, scope, limitations and assumptions, research methodology, organization and summary.

Chapter II is the Current State of Contracting, which uses Yoder's Three Integrative Pillars of Success© to identify maturity gaps. This chapter also looks into the increasing number of government contracts as well as the attrition rate and decrease rate in civilian agencies' hiring.

Chapter III addresses the question of "Is Procurement FW&A a Symptom of an Immature Contracting?" This chapter researches the correlation between the amount of procurement FW&A and the level of contracting maturity.

Chapter IV is the Structure and Training Requirements for Federal Contracting Personnel Certification. This chapter addresses the differences in structure between DAWIA certification, and FAC-C. The history of both of these programs is also addressed in this chapter. This chapter examines what is needed at every level of the certification process for both certification programs.

Chapter V is the Need for a Procurement FW&A Course. This chapter addresses the current lack of a procurement FW&A course as part of the certification process, as well as the benefits of implementing a mandatory course into the contracting certification curriculum.

Chapter VI is Current Procurement FW&A Training. This chapter addresses what current training is out there that could be used as a guide or framework for the new course.

Chapter VII is the Feasibility of Implementation. This chapter addresses the possible barriers of implementation as well as the ease of implementation.

Chapter VIII presents the conclusions and recommendation from the research conducted. This chapter also ensures that all three research questions have been properly addressed.

THIS PAGE INTENTIONALLY LEFT BLANK

II. CURRENT STATE OF CONTRACTING

The federal government is consistently battling procurement FW&A and takes it very seriously. The DoD OIG report (n.d.) defines fraud, waste and abuse as follows:

Fraud: A type of illegal act involving something of value through willful misrepresentation. Whether an act is, in fact, fraud is a determination to be made through the judicial or other adjudicative system and is beyond the auditor's professional responsibility.

Waste: involves the taxpayers not receiving reasonable value of money in connection with any government funded activities due to an inappropriate act or omission by players with control over access to government resources. Importantly, waste goes beyond fraud and abuse and most waste does not involve a violation of law. Rather, waste relates primarily to mismanagement, inappropriate actions with inadequate oversight.

Abuse: involves behavior that is deficient or improper when compared with behavior that a prudent person would consider reasonable and necessary business practice given the facts and circumstances. Abuse also includes misuse of authority or position for personal financial interests or those of an immediate or close family member or a business associate. Abuse does not necessarily involve fraud, violation of laws, regulations, or provisions of a contract or grant agreement. (p. 1)

Procurement FW&A takes place in both contingency environments as well as stateside. The GAO raised the concern of the government use of contractors in Bosnia in 1997, after already having indicated that contract management was a high risk back in 1992 (GAO, 2011, p. ii). The increased use of contractors raised the concern that it would increase FW&A due to lack of ability to properly monitor and administer contracts.

Procurement FW&A costs the federal government billions of dollars each year. In the recent Semiannual Report to Congress for the period ending March 31, 2013, the DoD Inspector General was able to get \$1.6 billion returned to the U.S government (Department of Defense [DoD] Inspector General, 2013a, p. i). Out of the \$1.6 billion returned, \$898.6 million was from civil judgments and settlements, and \$717.8 million in criminal fines, penalties, restitutions and forfeitures (DoD Inspector General, 2013a, p. ii). The federal government wastes billions of public dollars on improper payments to

individuals, organizations and contractors (Office of Inspector General [OIG] National Aeronautics Space Administration [NASA], 2012, p. i).

The Association of Certified Fraud Examiners (ACFE) website indicates that approximately five percent of all procurement dollars are lost to fraud annually (Association of Certified Fraud Examiners [ACFE], n.d., The Impact of Occupational Fraud section). The 2011 OMB report titled “Improving the way the government buys: Getting the best value for our taxpayer” states that federal contract spending was \$535 billion in 2010; assuming five percent was lost to fraud, this would equate to approximately \$27 billion. This figure is a significant amount indicating that steps need to be taken to control FW&A. To put things into perspective, NASA’s anticipated budget for FY2014 is \$16.6 billion (Leon, 2013, para 1). The amount of dollars associated with fraud is estimated to be approximately \$10 billion more than NASA’s FY14 anticipated budget.

The Offices of the Inspector General are in a constant battle to reduce FW&A, but are also limited in resources. As the number of contracted government requirements increase, so do the opportunities for procurement FW&A to occur. Cory Yoder’s Three Integrative Pillars of Success© analytical model was used in this research project to analyze the current state of contracting (Yoder, 2013).

A. YODER’S THREE INTEGRATIVE PILLARS OF SUCCESS©

Commander (ret.) Cory Yoder is a faculty member of the Naval Postgraduate School’s Graduate School of Business and Public Policy (GSBPP). Cory Yoder developed the Three Integrative Pillars of Success© (TIPS) in 2010 and the version used in Figure 1 is the 2013 modified version. The use of Yoder’s (TIPS) analytical model will determine if there is a maturity gap in the current state of contracting. The TIPS is set up with a foundation which is the Authorization & Appropriation block. The foundation then holds up three pillars which are 1. Personnel, 2. Platform, and 3. Protocol. These three pillars are the support pillars which hold the ceiling to the organization. A successful organization is achieved if the three pillars and foundation are mature.



Figure 1. Three Integrative Pillars of Success© (From Yoder, 2013, p. 16)

B. AUTHORIZATION AND APPROPRIATION INCREASE IN GOVERNMENT CONTRACTS

The government has relied more heavily on contractors to fill in the gaps that a downsized federal government could not fulfill since the end of the Cold War. In many instances contractors are used because the government no longer has its own personnel to do the work (GAO, 2008, p. 3). In July 2011, OMB put out a report entitled: *Improving the Way the Government Buys*. This report stated that one out of every six dollars of federal government spending is contracted out (OMB, 2011, p. 1).

Between 2000 and 2008, procurement budgets grew approximately 12 percent per year (OMB, 2011, p. 1). In March 2009, the president directed agencies to save approximately \$40 billion by FY 2011 (OMB, 2011, p. 1). This report also shows that in 2010 the federal contract spending was at \$535 billion with a projection of reaching a record \$615 billion by FY 2010 if the spending rate was not changed (OMB, 2011, p. 2). Figure 2 shows the government spending between 2000 and 2008, which reflects the 12 percent growth rate.

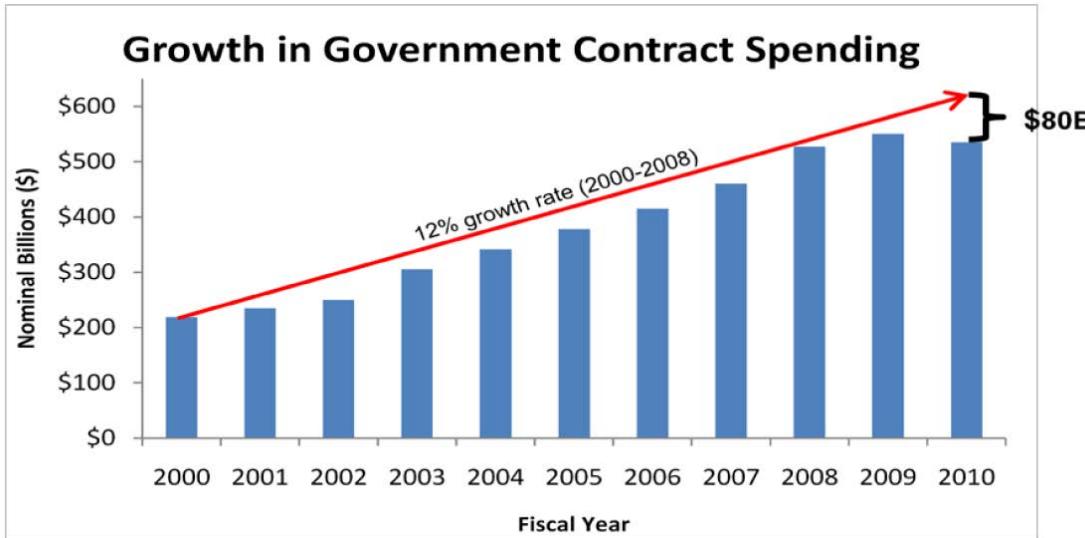


Figure 2. Growth in Government Contract Spending (From OMB, 2011, p. 1)

The authorizations and appropriations for numerous agencies are being reduced due to sequestration. The consequences of minimized authorizations and appropriations are difficult to spot in the foundation of the organization, but with time these gaps become more obvious.

C. PERSONNEL—FEDERAL ACQUISITION WORKFORCE

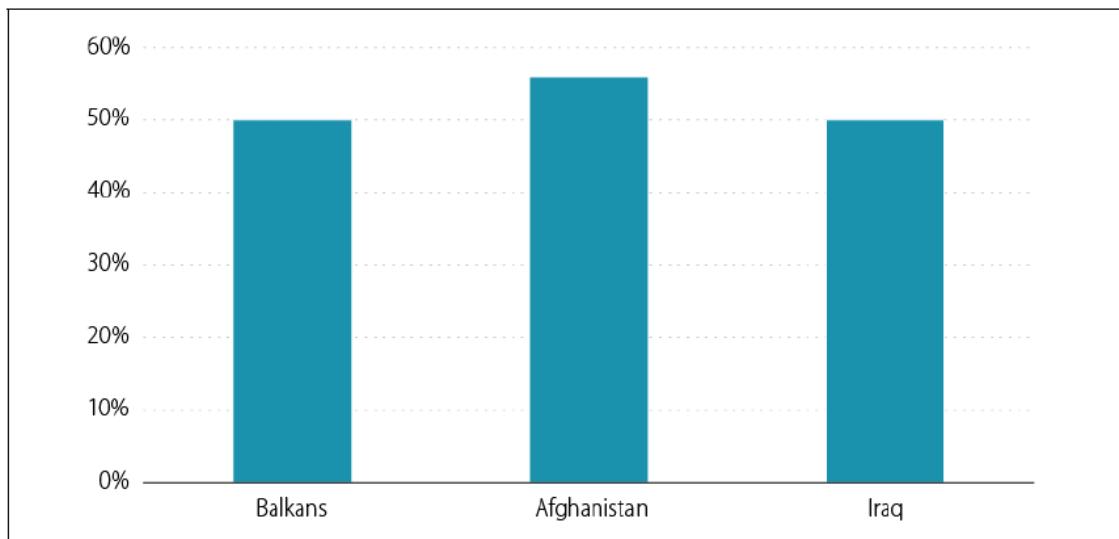
After the Cold War was over, it was anticipated that defense budgets would decrease, and there would not be a need for as many contracting personnel. The decrease in contracting personnel was also reinforced by the perceptions that technology and advancements in training would not require as many contracting professionals to get the job done (Special Inspector General for Iraq Reconstruction, 2006). The size of the federal contracting workforce has continued to shrink.

The Gansler Report of 2007 highlighted the issues affecting the Army contracting workforce and why immediate actions needed to be taken (2007, p. 2). It addressed the need to have a better trained workforce with more adequate numbers. The 2007 Gansler Report analyzed the state of the Army in contingency environments and noted that the Army workload would face over a 600 percent increase while performing more complex

actions than ever before (Gansler, 2007, p. 4). Other DoD and civilian agencies were also having to deal with the increase in workload and complexity.

The Gansler Report indicated that extensive outsourcing of support services in Iraq and Afghanistan equated to about 160,000 contractors, which equated to more than 50 percent of the total force (Gansler, 2007, p. 13). It is clear that the federal government is relying more and more on contractors to support them in their missions both in contingency environments and stateside.

The report by Swartz and Church (2013) shows the high percentage of contractor personnel compared with the number of military troops in the Balkans, Iraq and Afghanistan conflicts. See Figure 3. Contractors equated to approximately 50 percent of the total workforce for these conflicts (Swartz, M. & Church, J., 2013, p. 2). This trend has become the way the government operates under contingencies environments.



Source: Balkans: Congressional Budget Office. *Contractors' Support of U.S. Operations in Iraq*. August 2008. p. 13; Afghanistan: CRS analysis of DOD data, calculated as an average for the period September 2007–March 2013; Iraq: CRS analysis of DOD data, calculated as an average for the period September 2007–March 2011.

Note: DOD did not begin releasing data on contractors in U.S. Central Command until the second half of 2007.

Figure 3. Contractor Personnel as Percentage of DoD Workforce in Recent Operations
(From Swartz & Church, 2013, p. 2)

Tables 1 and 2 show the numbers of contractors and military troops for Afghanistan and Iraq. Table 1 for Afghanistan is for the period of September 2007 through March 2013. Table 2 for Iraq covers the period of September 2007 through March 2012. From March 2011 through March 2013, the troop levels in Afghanistan decreased by 34,100 which is a 34 percent decrease (Schwartz & Church, 2013, p. 23). While the number of military troops decreased by 34 percent, the number of contractors in Afghanistan increased by 17,457, which is an increase of 19 percent (Schwartz & Church, 2013, p. 23). The reduction in troops resulted in an increase in contractors.

In Iraq, the numbers for military troops and contractors was very similar in March 2010. By September 2010 there were 74,106 contractors versus 48,410 troops (Schwartz & Church, 2013, p. 25). It is clear that as the number of military troops decreased, the number of contractors in the contingency environment would be equal to or higher than the levels of military troops.

Table 1. Contractor Personnel and Troop Level in Afghanistan (From Schwartz and Church, 2013, p. 23)

September 2007–March 2013					
	U.S. Nationals	Third Country Nationals	Local Nationals	Total Contractors	Troop Levels
Sep. 2007	3,387	2,864	23,222	29,473	24,500
Dec. 2007	5,153	3,815	27,552	36,520	24,600
Mar. 2008	4,220	4,678	43,438	52,336	28,800
Jun. 2008	4,724	4,121	32,387	41,232	34,000
Sep. 2008	5,405	4,381	58,466	68,252	33,500
Dec. 2008	5,960	5,232	60,563	71,755	32,500
Mar. 2009	9,378	7,043	51,776	68,197	52,300
Jun. 2009	10,036	11,806	51,126	72,968	55,107
Sep. 2009	9,322	16,349	78,430	104,101	63,950
Dec. 2009	10,016	16,551	80,725	107,292	69,000
Mar. 2010	16,081	17,512	78,499	112,092	79,100
Jun. 2010	19,103	14,984	73,392	107,479	93,800
Sep. 2010	20,874	15,503	34,222	70,599	96,600
Dec. 2010	19,381	21,579	46,523	87,483	96,900
Mar. 2011	20,413	23,537	46,389	90,339	99,800
Jun. 2011	23,294	25,666	44,158	93,118	98,900
Sep. 2011	23,190	27,912	50,687	101,789	98,200
Dec. 2011	25,287	34,811	53,393	113,491	94,100
Mar. 2012	34,765	37,898	44,564	117,227	88,200
Jun. 2012	30,568	35,118	48,050	113,736	85,600
Sep. 2012	31,814	39,480	38,270	109,564	76,500
Dec. 2012	33,444	35,714	41,246	110,404	65,800
Mar. 2013	33,107	34,375	40,314	107,796	65,700

Source: CENTCOM Quarterly Census Reports and "Boots on the Ground" monthly reports to Congress.

Notes: DOD did not begin releasing data on contractors in CENTCOM until the second half of 2007.

The ratio of contractors to military troops increased once the troops pulled out from Iraq and Afghanistan. This happened in Iraq and also recently occurred in Afghanistan. With higher number of contractors on the ground and a smaller military presence, this brings up concerns regarding contract administration and monitoring.

Table 2. Contractor Personnel and Troop Level in Iraq (From Schwartz & Church, 2013, p. 25)

	September 2007–March 2012				
	U.S. Nationals	Third Country Nationals	Local Nationals	Total Contractors	Troop Levels
Sep. 2007	26,869	45,422	82,534	154,825	169,000
Dec. 2007	31,325	56,368	75,898	163,591	165,700
Mar. 2008	29,351	57,270	62,757	149,378	160,500
Jun. 2008	26,611	62,650	70,167	159,428	153,300
Sep. 2008	28,045	72,109	63,292	163,446	146,800
Dec. 2008	39,262	70,875	37,913	148,050	148,500
Mar. 2009	36,061	60,244	36,305	132,610	141,300
Jun. 2009	31,541	56,125	32,040	119,706	134,571
Sep. 2009	29,944	53,780	30,007	113,731	130,000
Dec. 2009	27,843	51,990	20,202	100,035	114,300
Mar. 2010	24,719	53,549	17,193	95,461	95,900
Jun. 2010	22,761	46,148	10,712	79,621	88,320
Sep. 2010	20,981	42,457	10,668	74,106	48,410
Dec. 2010	19,943	40,776	10,423	71,142	47,305
Mar. 2011	18,393	36,523	9,337	64,253	45,660
Jun. 2011	18,900	34,974	8,815	62,689	46,010
Sep. 2011	16,054	29,213	7,370	52,637	44,755
Dec. 2011*	11,237	9,445	3,204	23,886	11,445
Mar. 2012*	3,260	5,539	2,168	10,967	-

Source: CENTCOM Quarterly Census Reports and "Boots on the Ground" monthly reports to Congress.

Notes: DOD did not begin releasing data on contractors in CENTCOM until the second half of 2007. The military mission in Iraq ended in December 2011.

*Includes DoD contractors supporting U.S. Mission Iraq and Office of Security Cooperation-Iraq.

The *FY 2011 Annual Report on the Federal Acquisition Workforce* showed that in FY 1991, the number of contracting personnel (1102 job series) was 31,436 (see Figure 4). This number dropped to 26,608 in FY 2001 (FAI, 2013b, p. 2). In FY 2011, the contracting workforce (1102) consisted of 36,704 professionals, with an average age of 46.2 years (FAI, 2013b, p. 1). This increase can be attributed to such factors such as the Gansler Report and a current refocus on addressing the high risk contract management area as identified by the GAO report in 1992.

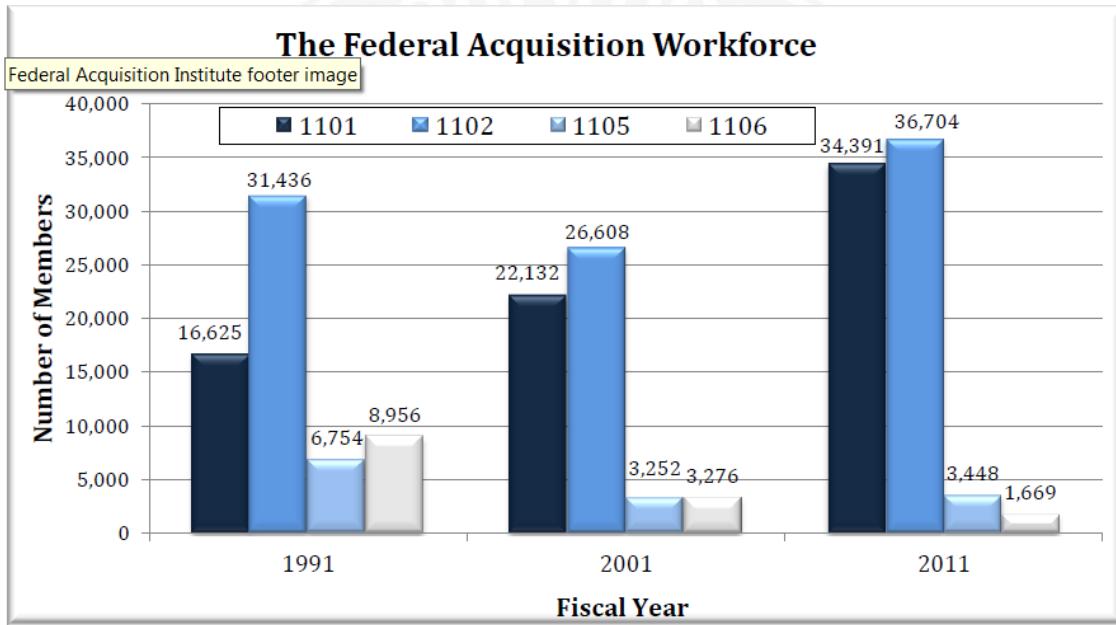


Figure 4. Federal Acquisition Workforce (From FAI, 2013b, p. 2)

The Federal Acquisition Institute (FAI) report released in April 2013 shows that the number of contracting officer representatives (COR) has increased tremendously. There were 9,182 in FY 2007 and that number has increased more than five times since the FAC-COR was established in 2007 (FAI, 2013b, p. 6). The number of COR in FY 2011 was listed at 52,4919 (FAI, 2013b, p. 6). The COR numbers are important to the 1102 series since they play a vital role in the monitoring and surveillance of contract performance.

The 1102 series seems to be making improvements to reach healthy numbers once again. There are still many questions on how they will be able to address certain areas such as retirements, and the effects that sequestration will have in the number of contracting personnel. Even though the numbers of personnel have increased, sequestration has affected employees who have been furloughed. It is not certain what percentage of the total 1102 series will be furloughed and how this will impact the administration and monitoring of their contracts.

According to the report *Defense Budget Priorities and Choices for Fiscal Year 2014*, it states that if allowed to continue, sequestration would represent about an 18

percent decline in the inflation-adjusted defense base budget between 2010 and 2014 (DoD, 2013b, p. 1). Sequestration would also reduce defense spending by an additional \$50 billion through FY 2021 (Defense Budget Priorities and Choices Fiscal Year 2014, 2013, p. 1) It is uncertain how this will directly affect the 1102 professional series, but it will very likely result in a reduction of the workforce capabilities once again.

1. Contracting Attrition Trends

The Federal Acquisition Institute (FAI) report released on April 2013 shows that FY 2011 professionals in the 1102 job series had 16 percent of their workforce that was eligible to retire. The report also showed an attrition rate of 4.3 percent for FY 09, 4.7 percent for FY 10 and 5.6 percent for FY 11 (FAI, 2013b, p. 10). See Table 3.

Table 3. Attritions from Select 1100 Series Occupations (From FAI, 2013b, p. 10)

Occupational Series	Attritions					
	FY09 Attritions	FY09 Rate	FY10 Attritions	FY10 Rate	FY11 Attritions	FY11 Rate
1101	3,782	12.6%	3,960	12.2%	4,050	11.5%
1102	1,290	4.3%	1,561	4.7%	1,990	5.6%
1105	197	6.2%	248	7.1%	260	7.4%
1106	135	7.6%	157	9.2%	170	10.1%
Total	5,404	8.3%	5,926	8.4%	6,470	8.5%

The retirement rate was also depicted in this report which was 2.7 percent for FY 09, 2.8 percent for FY 10, and 3.3 percent in FY 11. See Table 4. In addition, 58 percent of the 1102 will be eligible to retire within the next 10 years (FAI, 2013b, p. 11). As the retirement rate increases as the years progress, this becomes a concern with the workforce numbers and the ability to maintain a healthy count of contracting professionals.

Table 4. Attritions through Retirements from Select 1100 Series Occupations
(From FAI, 2013b, p. 10)

Occupational Series	Attritions - Retirements Only					
	FY09 Attritions	FY09 Rate	FY10 Attritions	FY10 Rate	FY11 Attritions	FY11 Rate
1101	844	2.8%	971	3.0%	1,161	3.3%
1102	819	2.7%	944	2.8%	1,197	3.3%
1105	106	3.3%	147	4.2%	143	4.1%
1106	55	3.1%	83	4.9%	103	6.1%
Total	1,824	2.8%	2,145	3.0%	2,604	3.4%

2. Hiring

The hiring rate for the 1102 contracting job series has decreased in the past three years. See Table 5. The hiring rate in FY 09 was 14.1 percent for the 1102 series. This number dropped to 11.7 percent in FY10 and then dropped to 6.9 percent in FY 11 (FAI, 2013b, p. 12). The trend is that the number of new hires is decreasing in the 1102 series. Figuring how to maintain the procurement force at healthy numbers if the numbers of retirements increase is an area of concern.

Table 5. New Hires into the 1100 Occupational Series (From FAI, 2013b, p. 12)

Occupational Series	New Hires					
	FY09 Hires	FY09 Rate	FY10 Hires	FY10 Rate	FY11 Hires	FY11 Rate
1101	5,816	19.4%	5,651	17.3%	3,842	10.9%
1102	4,209	14.1%	3,869	11.7%	2,485	6.9%
1105	427	13.4%	286	8.1%	271	7.7%
1106	210	11.8%	194	11.4%	170	10.1%
Total	10,662	16.4%	10,000	14.1%	6,768	8.9%

The TIPS© pillar of personnel can be interpreted as not being fully mature. Inadequate personnel to conduct proper contract monitoring can provide a gap in allowing procurement FW&A to occur more readily. In order to make this area more mature, the

government would either have to hire more personnel to address this concern or train these personnel even further to help minimize the risks associated with a reduced workforce.

D. PLATFORM

In Yoder's TIPS© analytical model, platform refers to the hardware and tangible software systems that provide for analysis, decision-making, production, management and communication (Yoder, 2103, p. 18). The contracting tools used to do the job are not a hindrance or something that is impeding contracting from being successful. Tools used to safeguard the public's interest include the Federal Procurement Data System (FPDS), System for Award Management (SAM), Excluded Parties List System (EPLS) which is now captured in SAM, Recovery.gov, and FAR 3.10 Code of Business Ethics and Conduct, which requires contractors to self-report violations of criminal law (FAR, 2013, Chapter 3).

E. PROTOCOL—CONTRACT MANAGEMENT AND OVERSIGHT

As the federal government continued to shrink over the years, the reliance on contractor support to fulfill their missions increased. DoD and civilian agencies began procuring more support service contracts. There has been a steady increase in the number of service contracts over the years. According to Schooner, "As a by-product of aggressive reform of the federal procurement process, oversight of government spending—both internal and external—has plummeted" (2001, p. 629). According to Rendon, "The lack of effective contract administration and contractor oversight increase the government's risk of jeopardizing the total value for the dollars spent on supplies and services" (2010, p. 2).

With the possible decrease in the FY14 federal workforce capacity due to such factors like retirements and sequestration, this will very likely create a situation where there will be a reduction in contract management and oversight. With the increase in the number of services contracts being awarded, this puts a strain on the ability to properly administer and monitor these contracts.

The number of contracting professionals in the 1102 series has fluctuated significantly in the last 20 years. The number of 1102 professionals in 2011 was higher than it was back in 1991. Even though the numbers in 2011 were higher than in 1991, sequestration is affecting the workforce capability of some 1102 professionals. Capaccio stated, “To accommodate this year’s \$37 billion in sequestration cuts, the Pentagon required 85 percent of its civilian workforce to take about six days of unpaid furloughs” (2013, para. 8). Furloughs to members of the 1102 series would create an environment where contracting professionals would have less time to conduct contract management for their specific contracts.

According to Capaccio:

The Defense Department may have to fire at least 6,272 civilian employees if automatic cuts known as sequestration slice \$52 billion from its fiscal 2014 budget, according to a Pentagon planning document which is still in its Draft/Pre-Decisional state. (2013, para 1)

If sequestration continues into the following years, then there will very likely be a smaller procurement presence to keep a close eye and monitor government contracts.

F. SUCCESSFUL ORGANIZATION

If one were to look at the federal government as an organization for the purposes of using the TIPS© model, then we would require a solid foundation, which would be the authorization and appropriation block, as well as three mature pillars of personnel, platform and protocol, in order to achieve having a successful organization in the eyes of the TIPS© analytical framework model.

The pillar of personnel would be considered fully mature in this study if it has knowledgeable, fully trained and adequate numbers of personnel. Platform would be considered fully mature if it has the proper systems and tools to award contracts as well as detect and investigate FW&A. Protocol would be considered fully mature if it has the appropriate directives and policies in place. This would include having appropriate training requirements that would assist organizations become successful.

It is clear that budgets are not getting larger any time soon. The TIPS[©] model shows that there are some gaps that prevent contracting from being fully mature. Having a fully mature contracting profession will not eliminate FW&A but can surely reduce it to a certain degree. It is clear that there are gaps in the pillars of personnel and protocol, and implementing a course in FW&A could help fill in the gaps caused by such factors like sequestration and attrition.

G. SUMMARY

This chapter discussed the continuous battle the federal government has against procurement FW&A, where billions of dollars are wasted (Larner, 2011, para 1). The heavy reliance of contracting requirements is greatly due to the lack of retained abilities and capabilities. This has forced the federal government to contract requirements that were previously provided or performed by the government. The government did make an effort per the implementation of the DAWDF to increase their workforce in DoD to address this issue (Cornell, n.d., para 1). The concern is that now with regular attrition, a reduced hiring rate, and sequestration, it is very likely that the contracting numbers go back down again. This reduction in capability will force the government to be stretched thin. There will be less people having to perform more work.

In summary, through the use of Yoder's TIPS[©] analytical model, it was determined that the state of contracting is not one that is fully mature where gaps in the pillars of personnel and protocol are generating opportunities for procurement FW&A to occur. The following chapter will examine if procurement FW&A is really a symptom of an immature contracting environment.

III. IS PROCUREMENT FW&A A SYMPTOM OF IMMATURE CONTRACTING?

While it can be identified that procurement FW&A is a symptom of immature contracting, this is not always the case. Procurement FW&A can also take place in a mature contracting environment, but likely to a lesser degree. Having a mature contracting environment and profession will also serve as a deterrent, thus reducing the amount of procurement FW&A.

An organization will have better internal controls if is more mature. In the article written by Rene Rendon, he identifies that there are six contract management key process areas which are: procurement planning, solicitation planning, solicitation, source selection, contract administration and contract closeout. Rendon states, “How an organization performs the key process areas and the extent to which the key practices incorporate best practices will determine the organization’s contract management process maturity level” (2008, p. 837).

In Rendon’s Contract Management Maturity Model (CMMM), there are five levels of maturity ranging from Level 1: ad hoc to Level 5: optimized. At the ad hoc maturity level there are the greatest potential risks due to lack of structure or weakness in key process areas. In an optimized level of maturity they use performance metrics, establish Lessons Learned and Best Practices programs to improve contract management processes, standards, and documentation (Rendon, 2008, p. 838).

If a company is at the basic level of maturity, they lack processes in the key areas and fail to safeguard themselves against deviant opportunists. Deviant opportunists have a deep operational knowledge of processes and may be connected to the contract, and there is a systematic abuse of trust (Caulfield, n.d., p. 5). This is the stage where procurement FW&A is the most likely to occur because it is high risk. A deviant opportunist is always alert for opportunities to corrupt systems (Caulfield, n.d., p. 5). A deviant opportunist is less likely to operate in a fully mature environment where systems are operating at a mature level.

When maturity levels are not fully reached, procurement FW&A can be more prevalent. Tom Caulfield states that there are three types of fraudsters which are situational opportunist, the deviant opportunist and the business opportunist (n.d., p. 5). The situational opportunist is exactly what the name implies. Caulfield defines a business opportunist as one who commits an act of fraud that on its face seems to only benefit the company, but in reality is done by the fraudster to increase his/her standing in the company. They are looking for financial gain in yearly bonuses in the form of awards or pay (Caulfield, n.d., pp. 5–6). The federal government is more vulnerable when maturity levels are not reached.

Opportunist fraudsters can try to take advantage of the government in various ways to include: bribery, gratuity, kickbacks, split purchases, leaking of acquisition data, change order abuse, bid manipulation, rigged specification and unjustified sole source (Caulfield, n.d., p. 8). There are also other techniques to defraud the government which include double billing, defective parts and part substitution. While many of these techniques can cause a lot of harm to the government, the delivery of defective parts and product substitution is one where loss of life can be involved and is taken very seriously.

Having the ability to identify fraud indicators is key to being able to reduce procurement FW&A. The current maturity state of contracting is somewhere between being fully mature and being in an ad-hoc state. In this partially mature state, opportunistic fraudsters are ready to take advantage of the vulnerabilities in the system. Proof of the opportunistic fraudsters out there is that in 2006, there were over 5700 entities debarred according to the General Services Administration (GSA) Excluded Parties List System (EPLS) (Caulfield, n.d., p. 3).

As stated by Tom Caulfield, “There is no greater tool in the detection of procurement fraud than knowledgeable employees” (n.d., p. 7). The recommendation is to close this gap by incorporating a course specific to procurement FW&A, which will assist in the reduction of wasted tax payer dollars. It is uncertain if the government will be able to fill in the gaps in personnel but one solution is to provide additional training so that contracting personnel are better equipped to identify and prevent procurement FW&A.

Providing a procurement FW&A course will assist in filling in the maturity gap. Having this procurement FW&A course is a necessity to help address this problem. The contracting community has to be better trained to assist in the battle of procurement FW&A. One good example is the ability to be better trained in spotting procurement fraud indicators. The following chapter will address the current structure of training for both DoD contracting personnel as well as those from civilian agencies.

THIS PAGE INTENTIONALLY LEFT BLANK

IV. STRUCTURE AND TRAINING REQUIREMENTS FOR FEDERAL CONTRACTING PERSONNEL CERTIFICATION

In order to fill in the gap in the current state of contacting by implementing a procurement FW&A course, we need to understand the contracting certification process for contracting specialists both in DoD and civilian agencies. It is important to understand the differences in structure between the two. Once the structure is understood then one can begin to understand the differences in training requirements between DoD and civilian agencies regarding certification level requirements. I will review these areas in detail so that it is clear what is expected of contracting personnel in each level of their certification process for both DoD and civilian agencies.

A. HOW CIVILIAN AGENCIES AND DOD ARE STRUCTURED REGARDING PROFESSIONAL CERTIFICATION OF THEIR CONTRACTING WORKFORCE

The federal government previously did not have a consistent way in which contracting professionals 1102s were certified within different civilian agencies. Civilian agencies had different training requirements for the same level of certification for their contracting professionals. In December 2005, the Federal Acquisition Certification in Contracting (FAC-C) was approved by the Chief Acquisition Officers Council (CAOC).

Unlike civilian agencies, DoD uses Defense Acquisition Workforce Improvement Act (DAWIA) certification levels for the contracting certification of their workforce. These certification levels are known as DAWIA Level I-III. This act was signed into law in November 1990 to require DoD to establish education and training standards, requirements, and courses for the civilian and military workforce (Defense Acquisition Workforce Improvement Act [DAWIA], n.d., para. 1). DoD did not have a way for all Defense agencies to be in line with each other concerning the certification process of their contracting personnel. DAWIA enabled DoD to be able to have the same standard of certification across the entire DoD.

In order for civilian agencies to be more in line with each other, the federal government implemented FAC-C in 2005. Even though DoD uses DAWIA certification,

implementation of the FAC-C enabled the civilian agencies to use the same certification process throughout, and to be closer aligned with DoD. The FAC-C program is intended to mirror as closely as possible the requirements that the DoD established for its contracting workforce under the Defense Acquisition Workforce Improvement Act (OMB, 2006, p. i).

Now that the clear distinction has been made that DoD uses DAWIA certification for the certification process of their civilian and military personnel and civilian agencies use FAC-C for their certification, we can now analyze the content of their training. Both DAWIA and FAC-C go from Level I as the basic certification, to Level III which represents the highest certification.

B. TRAINING REQUIREMENTS FOR FAC-C CERTIFICATIONS

FAC-C certifications are applicable for federal employees in all executive agencies except those subject to DAWIA which would be those in DoD. FAC-C serves as evidence that an employee meets the applicable core education, training and experience requirements for the general schedule (GS)-1102 series (OMB, 2006, p. 1).

FAC-C certification is comprised of three levels. Level I consist of 1 year of contracting work experience with five core courses and one elective. Level II consist of a Level I certificate, two years of contracting work experience, five core courses and two electives. Level III consists of Level I and II certificate, 4 years of contracting work experience, one core course and two electives.

The classes required for FAC-C Level I are the following:

- Shaping Smart Business Arrangements
- Mission Support Planning
- Mission Strategy Execution
- Mission Performance Assessment
- Mission Focused Contracting
- One elective

The classes required for FAC-C Level II are the following:

- Business Decision for Contracting
- Intermediate Contracting for Mission Support
- Legal Considerations in Contracting
- Cost Analysis and Negotiation Techniques
- Advanced Contracting for Mission Support
- Two electives

The classes required for FAC-C Level III are the following:

- Advanced Business Solutions for Mission Support
- Two electives

The following Table 6, taken from the FAI website, shows a more detailed breakout of the training requirements for each FAC-C certification level. This table goes into the education requirements as well as detail about some classes that will no longer be offered in FY14.

Table 6. FAC-C Certification Requirements (From FAI, 2013a)

Requirements for:	FAC-C Level I	FAC-C Level II	FAC-C Level III
Experience	1 year of contracting work experience	FAC-C Level I Certification & 2 years of contracting work experience	FAC-C Level II Certification & 4 years of contracting work experience
Education	Baccalaureate degree OR at least 24 semester hours among these disciplines: accounting, law, business, finance, contracts, purchasing, economics, industrial management, marketing, quantitative methods, or organization and management.	Baccalaureate degree OR at least 24 semester hours among these disciplines: accounting, law, business, finance, contracts, purchasing, economics, industrial management, marketing, quantitative methods, or organization and management.	Baccalaureate degree AND at least 24 semester hours among these disciplines: accounting, law, business, finance, contracts, purchasing, economics, industrial management, marketing, quantitative methods, or organization and management.
Training	<p>5 Core Courses:</p> <ul style="list-style-type: none"> • CON 100 Shaping Smart Business Arrangements • Choose 1 from the following: <ul style="list-style-type: none"> ◦ FCN 110 Mission Support Planning (online) ◦ CON 110 Mission Support Planning (classroom)* • Choose 1 from the following: <ul style="list-style-type: none"> ◦ FCN 111 Mission Strategy Execution (online) ◦ CON 111 Mission Strategy Execution (classroom)* • Choose 1 from the following: <ul style="list-style-type: none"> ◦ FCN 112 Mission Performance Assessment (online) ◦ CON 112 Mission Performance Assessment (classroom)* • CON 120 Mission Focused Contracting (classroom) • 1 Elective <p>*<i>CON 110, CON 111, and CON 112 will no longer be offered in FY14. These courses may still be used for certification purposes until September 30, 2014.</i></p>	<p>5 Core Courses:</p> <ul style="list-style-type: none"> • Choose 1 from the following: <ul style="list-style-type: none"> ◦ CON 200 Business Decisions for Contracting (online) ◦ CON 214 Business Decisions for Contracting (classroom)* • CON 215 Intermediate Contracting for Mission Support • CON 216 Legal Considerations in Contracting • CON 217 Cost Analysis and Negotiation Techniques • CON 218 Advanced Contracting for Mission Support • 2 Electives <p>Plus all Level I training</p> <p>*<i>CON 214 will no longer be offered in FY14. This course may still be used for certification purposes until September 30, 2014.</i></p>	<p>1 Core Course:</p> <ul style="list-style-type: none"> • Choose 1 from the following: <ul style="list-style-type: none"> ◦ CON 353 Advanced Business Solutions for Mission Support (classroom)* ◦ CON 360 Advanced Business Solutions for Mission Support (classroom) • 2 Electives <p>Plus all Level I and Level II training</p> <p>*<i>CON 353 will no longer be offered in FY14. This course may still be used for certification purposes until September 30, 2014.</i></p>

C. TRAINING REQUIREMENTS FOR DAWIA CERTIFICATIONS

Certifications for the DoD contracting workforce is handled by the Defense Acquisition University in the form of DAWIA certifications. DAWIA certifications are also set up in the form of Level I through Level III for contracting personnel. FAC-C certifications were established for civilian agencies to closely mirror what DAU was doing regarding the DAWIA certification (OMB, 2006).

DAWIA certification is also comprised of three levels. Level I consists of one year of contracting work experience with 10 core courses (effective 1 October 2013). Level II consist of a Level I certificate, 2 years of contracting work experience, 9 core courses (effective 1 October 2013). Level III consists of Level I & II certificate, 4 years of contracting work experience, two core courses, one course for the Harvard Business Management Modules and one elective.

The classes required for DAWIA Level I are the following:

- Federal Acquisition Regulation (FAR) Fundamentals
- Shaping Smart Business Arrangements
- Contract Planning
- Contract Execution
- Contract Management
- Fundamentals of Cost and Price Analysis
- Contract Format and Structure for DoD e-Business Environment
- Small Business Program for Contracting Officers
- Performance Based Payments and Value of Cash Flow

The classes required for DAWIA Level II are the following:

- Fundamentals of Systems Acquisition Management
- Business Decisions for Contracting
- Legal Considerations in Contracting
- Intermediate Cost and Price Analysis
- Source Selection and Administration of Service Contracts
- Contract Administration and Negotiation Techniques in a Supply Environment
- Managing Government Property in the Possession of Contractors
- Analyzing Contract Costs
- Negotiation

The classes required for DAWIA Level III are the following:

- Intermediate Systems Acquisition
- Contracting for Decision Makers
- One course from the Harvard Business Management Modules

- One Elective from the following options
 - Mission-Focused Services Acquisition
 - Acquisition Law
 - Overhead Management of Defense Contracts
 - Advanced Contract Pricing
 - Construction Contracting
 - Fundamentals of Cost Accounting Standards
 - Advanced Contingency Contracting Officer's Course
 - Understanding Industry

The training requirements for DAWIA are more than those required under the FAC-C certification process. The following section will provide a side by side comparison between the two.

D. COMPARISON OF TRAINING REQUIREMENTS BETWEEN FAC-C AND DAWIA

Here are three tables (Table 7, Table 8 and Table 9) that show a side by side comparison of the different training requirements between FAC-C and DAWIA. The tables are presented by level of certification in which Level I is the basic certification and Level III is the advanced. The purpose of the side by side comparison is to be able to show the specific courses offered at each level of certification between FAC-C and DAWIA and assist in the visualization process of the differences between the two.

Table 7. Level I Certification Comparison between FAC-C and DAWIA (After Defense Acquisition University [DAU], 2013; FAI, 2013a)

Level I Certification	
FAC-C	DAWIA
Shaping Smart Business Arrangements	Shaping Smart Business Arrangements
Mission Support Planning	Contract Planning
Mission Strategy Execution	Contract Execution
Mission Performance Assessment	Federal Acquisition Regulation (FAR) Fundamentals
Mission Focused Contracting	Contract Management
One Elective	Fundamentals of Cost and Price Analysis
	Contract Format and Structure for DoD e-Business Environment
	Small Business Program for Contracting Officers
	Performance Based Payments and Value of Cash Flow

As can be seen on the table above, FAC-C is requires five courses and one elective for Level I certification, while DAWIA requires nine courses with no electives. There is not a specific course offered for procurement FW&A at this level. These courses are designed to be entry level courses and the possibility of incorporating a procurement FW&A course would probably not be the most beneficial at this level as compared to incorporating it at either Level II or III of the certification process. At this level contracting professionals will only have over a years' experience and will be focusing more on learning the basics of the contracting career field.

Table 8 is for Level II certification for both FAC-C and DAWIA.

Table 8. Level II Certification Comparison between FAC-C and DAWIA (After DAU, 2013; FAI, 2013a)

Level II Certification	
FAC-C	DAWIA
Business Decision for Contracting	Business Decisions in Contracting
Legal Considerations in Contracting	Legal Considerations in Contracting
Intermediate Contracting for Mission Support	Fundamentals of System Acquisition Management
Cost Analysis and Negotiation Techniques	Intermediate Cost and Price Analysis
Advanced Contracting for Mission Support	Source Selection and Administration of Service Contracts
One Elective	Contract Administration and Negotiation Techniques in a Supply Environment
One Elective	Managing Government Property in the Possession of Contractors
	Analyzing Contract Costs
	Negotiation

As can be seen above, FAC-C requires five courses and two electives for Level II certification, while DAWIA requires nine courses with no electives. There are two identical courses and then the other courses are slightly different.

Table nine below is for FAC-C and DAWIA Level III certification.

Table 9. Level III Certification Comparison between FAC-C and DAWIA (After DAU, 2013; FAI, 2013a)

Level III Certification	
FAC-C	DAWIA
Advanced Business Solutions for Mission Support	Intermediate Systems Acquisition
One Elective	Contracting for Decision Makers
One Elective	One Course from Harvard Business Management Modules
	One Elective from following list:
	Mission-Focused Service Acquisition
	Acquisition Law
	Overhead Management of Defense Contracts
	Advanced Contract Pricing
	Construction Contracting
	Fundamentals of Cost Accounting Standards
	Advanced Contingency Contracting Officer's Course
	Understanding Industry

As can be seen in the table above, FAC-C and DAWIA Level III certification process offers the most flexibility if a course were to be incorporated into the curriculum. By the time contracting professionals are taking Level III courses they will have over four years of experience and will be more familiar with the ins and outs of performing contracting work.

E. SUMMARY

In this chapter I discussed the establishment of both DAWIA and FAC-C and the differences between the two. DAWIA was established to address training concerns with the DoD workforce and FAC-C was established to addressed the concerns of the civilian agencies. This chapter also presented all the courses required for each level of certification in both DAWIA and FAC-C to assist in the understanding of the two certification processes. This chapter presented the courses for each level by course title

so that one could see exactly what type of course are currently being required as part of the certification process of contracting professionals in both DoD and civilian agencies.

In the next chapter, I will discuss the need for a procurement FW&A course.

V. NEED FOR A PROCUREMENT FW&A COURSE

In the early 1990s, there was a push for procurement reform, which resulted in works such as the one from Professor Steven Kelman (1990) titled *Procurement and Public Management: The Fear of Discretion and the Quality of Government Performance*. Works like this one pushed for the government to become more efficient. The government took measures to make itself more efficient by being a more businesslike government. The government at the same time had dramatic reductions in acquisition personnel (Schooner, 2001, p. 671). Schooner states, “The Kelman reforms provided buyers discretion to act in a businesslike fashion *at the expense of* oversight and bureaucratic control (Schooner, 2001, p. 673). The lack in oversight in the higher efficient government is one of the concerns on why something has to be done to reduce and prevent procurement FW&A.

There has been a strong push since 2007 to get the numbers of 1102s back to what they once were. This has been a tough battle due to attrition and sequestration. Unless the 1102 career series is identified as a critical area where 1102s will not be downsized and furloughed, the government is going to have to take some actions to ensure that the number of procurement FW&A cases do not increase.

As time progresses and the procurement workforce becomes smaller once again, the number of contracts having to be administered will not decrease, which becomes a problem. There will be less 1102s having to cover more contracts, which have also increased in complexity over time due to the increased use of service contracts. The 1102s who award and administer these contracts will have to be sharper than ever to notice when procurement FW&A is occurring. The contracting organizations and profession will have to reach a higher level of maturity to be able to properly tackle this issue.

One approach to assist in reducing procurement FW&A is to provide the contracting community additional training in this area, which would be part of their

certification process. This training would be a mandatory course which would be specifically tailored to procurement FW&A.

The need for a procurement FW&A course is necessary as the contracting profession works to fill in the gaps to become more mature. The contracting profession needs self-regulation and not just external regulation by means of IG's or criminal prosecutions or protest, and therefore, FW&A must be taught more specifically. Professor Schneyer notes that there is no inherent reason why disciplinary agencies could not become more proactive or that greater efforts could not be made to encourage knowledgeable parties to report misconduct to these bodies (Wilkins, 1996, p. 478). Providing this additional training would allow the contracting profession to be more knowledgeable.

Developing a FW&A course establishes a collective training and knowledge of information separate and independent of ethics training. The premise of ethics revolves around the integrity of individuals and not the entity as a whole. Procurement FW&A training should not limit itself to addressing prevention, identification, techniques and analytical tools. Procurement FW&A training is different than ethics training in that it can produce measurable and tangible results. A procurement FW&A course is needed in addition to current annual ethics training.

A. LACK OF A PROCUREMENT FW&A COURSE AS PART OF DAWIA AND FAC-C CERTIFICATION

It is somewhat perplexing that neither FAC-C nor DAWIA certification contain a specific course on procurement FW&A as part of the certification process for contracting professionals. This is an area where the federal government is losing billions of dollars. Contracting professionals play a vital role in preventing and spotting procurement FW&A. If contracting professionals are not highly trained to identify procurement FW&A then they might not be able to properly spot procurement FW&A, which would amount to millions of wasted taxpayer funds.

It is clear that more has to be done to address the issue of procurement FW&A. As of March 31, 2013, the DoD IG workforce totaled 1,578 employees (DoD Inspector

General [IG], 2013, p. 4). In 2011, DoD had 24,397 1102s (FAI, 2013b, p. 18). Even though this information is from two different years, this shows how much work the DoD IG has to do in comparison to the amount of work the 24,397 contracting personnel are outputting. This information helps to show the big task the IG's office has, in order to investigate procurement FW&A. Besides addressing procurement fraud, the DoD IG also works on public corruption, product substitution, health care fraud, illegal technology transfer and cybercrime and computer network intrusions (DoD Inspector General, 2013a, p. 5).

By having a procurement FW&A course as part of both FAC-C and DAWIA certification process, this would ensure the contracting workforce gets highly trained in this specific area. Having a contracting workforce trained specifically in procurement FW&A could help alleviate the concerns of an increasing environment where procurement FW&A could thrive even more. This better trained workforce could be of greater assistance to the IG community by being able to properly spot irregularities and areas of concerns. These would be the new generation of contracting professionals.

The current curriculum of both FAC-C and DAWIA certification include courses that are essential for the proper development of contracting professionals. One area that both FAC-C and DAWIA do not address in depth is providing thorough training on procurement FW&A. The DoD IG office for the reporting period of October 1, 2013 through March 31, 2013 conducted investigations that resulted in 56 arrests, 102 criminal charges, 98 criminal convictions, 98 suspensions, 95 debarments, and got back \$1.6 billion (DoD Inspector General, 2013a, p. i). This provides hope that through the use of further trained contracting personnel, the numbers of taxpayer dollars returned the federal government would be even higher. By having further trained contracting personnel this could also serve as a deterrent to those who want to be opportunistic and take advantage of the government.

B. BENEFITS OF HAVING A COURSE IMPLEMENTED INTO CERTIFICATION PROCESS

The implementation of a mandatory course on procurement FW&A would ensure that the contracting community would be trained as part of their certification process. This would make sure that contracting specialists are all trained by the time they have completed their FAC-C or DAWIA Level III training.

Having access to this specific type of training would allow the contracting community to be better equipped to spot and prevent procurement FW&A. This training should allow them to have a better idea of what they are looking for and what is out of the norm. If properly trained, the contracting community could be a huge asset to the OIG.

A benefit for the DoD community is that this would allow leadership to be able to send contracting specialist to deployed locations knowing they have been fully trained in spotting procurement FW&A. Procurement FW&A has been a huge problem in deployed locations so even if there are corrupt government employees, hopefully having more trained government employees will assist in helping spot corrupt individuals and reporting them to the appropriate channels. In the article written by Amanda Flint “Procurement integrity in contingency operations: a case study of Army Contracting Officer corruption in Operation Iraqi and enduring freedom utilizing occupational fraud theory” she cites the report by the Commission on Wartime Contracting (CWC) reported to Congress that at least \$31 billion and possibly as much as \$60 billion had been lost to fraud associated with these operations (Thibault et al., 2011b, p. 1).

Having a procurement FW&A course integrated as part of the certification process would take advantage of the current infrastructure already set up by FAC-C and DAWIA. Having this course be part of the curriculum would provide the benefit that DoD and civilian agencies will be able to stay on top of the current procurement FW&A trends that are being targeted against the government. By having the course be part of the curriculum would allow both FAC-C and DAWIA to be able to modify it when the trends change. Having a formal course would also be beneficial in that contracting personnel

can take the offensive on this matter and not have to wait and learn from when it happens to them or their co-workers.

C. SUMMARY

In this chapter, I provided an overview of the need for a procurement FW&A course, the current lack of a procurement FW&A course as part of the certification process, and the benefits of having a course implemented into the certification process. This chapter shows the billions of dollars that were wasted in contingency environment to assist in the reinforcement that something needs to be done to address this issue now. In this chapter I also addressed the benefits of implementing this course. Not only will it assist the contracting community but it will also be beneficial to the IG community and the government as a whole. If contract management is a high risk area as identified by the GAO, then incorporating a course like this would seem to fall in line with trying to mitigate this risk.

In the next chapter, I will address what training on procurement FW&A is currently out there and who is providing it.

THIS PAGE INTENTIONALLY LEFT BLANK

VI. CURRENT PROCUREMENT FRAUD, WASTE AND ABUSE TRAINING

It might be assumed that the contracting workforce is receiving in-depth training on procurement FW&A as part of the certification process, but that is currently not the case. DAWIA and FAC-C currently do not require a procurement FW&A course as part of the curriculum, but there are courses out there that could be used as a model to set up a course for the contracting workforce.

The existing FW&A training is primarily focused on investigative analysis and techniques, and does not necessarily address the specific needs of the contracting workforce.

A. CURRENT TRAINING AVAILABLE

This research examines available training that could be used to assist in the creation of a procurement FW&A course. In order to develop a course, an assessment of the content of current courses should be examined to determine relevancy to the current needs of the contracting workforce.

Most government agencies provide annual ethics training that encompasses FW&A, and usually does not go into depth from the procurement perspective. For instance, these courses typically do not teach or offer instructions on how to examine invoices for double billing.

The ACFE website was used to research available training. ACFE is not a federal entity, but their reports are widely used throughout the federal government. The ACFE offers various basic courses on fraud such as: Principles of Fraud Examination, Fraud Prevention, and Using Data Analytics to Prevent Fraud. These are just a few of the basic courses offered by the ACFE.

Research of DAU training revealed that there are limited offerings of procurement FW&A courses. One course currently being offered at DAU is Procurement Fraud Indicators.

The Council of the Inspector Generals on Integrity and Efficiency (CIGIE) offers training for the Inspector General community. The Inspector General offers basic training through advanced level courses which capture ethics, program fraud investigations, contract fraud investigations, and grant fraud investigations.

NASA's System for Administration, Training, and Educational Resources for NASA (SATERN) has a broad range of awareness courses on fraud from entry level up to senior management level. SATERN has an acquisition integrity program (AIP) with a 4 tier structure: Tier 1 is for senior management, Tier 2 is for trainers, Tier 3 is for acquisition workforce and Tier 4 is for general training. In addition, NASA offers courses such as the following: Auditing for Cash and Inventories, Integrity in the Workforce, and Preventing Fraud and Abuse.

It is clear that agencies and organizations are trying to address the issue of procurement FW&A. The key is to be able to capture the information out there so that it can be implemented into one course that provides in depth training to the contracting community as part of the certification process and assists in maturing the contracting profession.

B. SUMMARY

In this chapter, information about what available training is out there was presented. Being able to identify what training is out there on procurement FW&A was one of the limitations of this study due to the limitations on getting access to all the training sites for the different organizations. This chapter reflected the current training from organizations such as the ACFE, DAU, CGIE, and NASA's training site SATERN. This chapter captured training associated with procurement FW&A as closely as possible for these organizations. This chapter showed that there is currently training out there that could be used to assist in the development of a procurement FW&A course without having to create a course from the beginning.

The next chapter will look into the feasibility of implementing a course to address need to reduce procurement FW&A.

VII. FEASIBILITY OF IMPLEMENTING A PROCUREMENT FRAUD, WASTE, AND ABUSE COURSE

The FAC-C certification process for a contracting specialist to achieve their FAC-C Level III is to have taken 16 courses which includes five elective courses. The DAWIA certification process for contracting specialists to achieve their DAWIA Level III would require them to take 22 courses and one elective.

The implementation of a specific course on procurement FW&A seems feasible to implement into the FAC-C curriculum since there are five electives as part of the certification process and there are 16 core courses required. DAWIA certification for Level III as of 1 October 2013 will require 22 courses and one elective. Having the elective makes it feasible to implement this course. If a course would be added the DAWIA certification process this would put the number of core classes to 23 plus one elective.

Adding one more course of such great importance to the DAWIA and FAC-C curriculum seems to be a feasible solution to addressing the need to reduce the amount of procurement FW&A which is adding up to billions of dollars. The feasibility from a strictly curriculum basis seems like it is very feasible.

Other areas of feasibility concerning the implementation of a new course include if funding and staffing will be a factor when implementing a new course.

A. BARRIERS FOR IMPLEMENTATION

One has to review what would be the barriers to implementing a new procurement FW&A course as part of the certification process for both DAWIA and FAC-C. One of the barriers for implementation is the very real concern for costs associated with implementing a new course. Both DoD and civilian agencies across the board are having to work with budget cuts. If sequestration were to continue this would mean that defense spending would be further reduced by more than \$50 billion each year through FY 2021 (Department of Defense, 2013b, p. 1). This could be a major barrier if it is hard enough

to accomplish the current training requirements with the limited budget and now adding another course could definitely be another obstacle to overcome for organizations.

One other barrier to being able to implement a procurement FW&A is the ability to support another course into the curriculum. Concerns might be if there are adequate/qualified personnel who can teach and support the implementation of this course. Decision makers might determine that there is a need for this course but having it be part of mandatory course that is offered in residence is something that is not feasible at this moment and might propose that it be delivered on-line. There are tools out there such as the tool used by the Naval Postgraduate School (NPS) called Elluminate which is a method of providing live training through distance learning.

The decision will have to come down from DoD and civilian agencies if they believe that the implementation of this course will enable them to better protect taxpayer funds from procurement FW&A.

B. EASE OF IMPLEMENTATION

It is clear that there are possible barriers to implementing this course but if DoD and civilian agencies decide that they should implement this procurement FW&A course, then some aspects of the implementation process should be fairly smooth. DAWIA and FAC-C already have the infrastructure set up for providing courses to the contracting community. In the case of FAC-C there are five elective courses where this course could be substituted in. In the case of DAWIA, there is less flexibility but it can still be accomplished since there is one elective as part of the Level III certification process.

C. SUMMARY

In this chapter I presented two possible barriers to the implementation of a procurement FW&A course. These barriers are true concerns in these times when budgets are being reduced and organizations still have to find ways to keep their missions going.

VIII. CONCLUSION AND RECOMMENDATION

A. CONCLUSION

This research paper looked into the current state of contracting and demonstrated that there is a gap in maturity. The current lack of procurement FW&A training also does not reflect a mature profession. With approximately five percent of all procurement dollars being lost to fraud annually, it is clear that something needs to be done quickly to stop the bleeding of U.S. taxpayer funds.

This research paper was conducted with the intention to make a positive change in the way procurement FW&A is fought. The government is in a new era where budgets are being reduced and the contracting community has to be even sharper to protect U.S. public funds. This research project was intended to come up with one possible solution to minimize the federal government's risk by researching the implementation of a procurement FW&A course into the certification curriculum.

This research proposed the implementation of a procurement FW&A as a possible solution to assist addressing this issue.

1. ANSWER TO RESEARCH QUESTIONS

This research paper's objective was to answer the following questions:

- Should a procurement FW&A course be part of the mandatory training requirement for procurement certification to enable maturity of the profession?
- What are the benefits of having a course implemented into the certification process?
- What is the ease of implementation of adding a new mandatory FW&A course for FAC-C/DAWIA certification of contracting professionals?

It is clear from the research conducted that there seems to be a clear indication that a procurement FW&A course should be implemented as part of the certification process. There is a definite need to do something to address procurement FW&A and keep it from becoming an even larger problem than what it currently is.

The benefits associated with the implementation of this course are numerous but they include such things as better equipping the contracting workforce with the ability to spot and prevent procurement FW&A.

The final secondary question asks about the ease of implementation of adding a new mandatory FW&A course. The research addresses the barriers of implementation but then addresses that it seems very feasible to incorporate this course into the curriculum for various reasons. One reason is that there is a current structure in place and the other reason is that there is room to add this course.

B. RECOMMENDATION

After having conducted this research and realized that the contracting profession is not fully mature, my recommendation is that a procurement FW&A course should be implemented into the certification process of contracting specialists. From the side by side comparison I conducted, it seems that it would be the most feasible to incorporate this course into the Level III part of the curriculum where the contracting students are more seasoned and have a better understanding on how the contracting world functions. This is also the level where their contracting warrants will be the highest and where the risk is even greater due to the high dollars contracts that they will be obligating or disbursing funds from.

Recommendation is that this course be offered in a live setting where students could interact with a live instructor and class. It is key that the federal government take additional steps to address the ever lingering issue of procurement FW&A. It is something that will never go away, but continuous training in this area would also serve as great deterrent for unscrupulous contractors and corrupt officials. If the contracting community is provided with the additional training in procurement FW&A this can allow them to be a more active participant in the big fight against procurement FW&A.

LIST OF REFERENCES

American Federation of American Employees. (n.d.). What is sequestration?: What is sequestration and what does it mean? Retrieved from <https://www.afge.org/Index.cfm?page=WhatisSequestration>.

Association of Certified Fraud Examiners. (n.d.). *2012 report to the nations*. Retrieved from <http://www.acfe.com/rttn-highlights.aspx>.

Caulfield, T. (n.d.). The anatomy & illusiveness of procurement fraud. *Journal of the Association of Inspector General*. Retrieved from http://www.theiia.org/chapters/pubdocs/27/AIG_Article.pdf.

Capaccio, T. (2013). Pentagon weighs firing thousands under 2014 spending cuts. *Bloomberg*. Retrieved from <http://www.bloomberg.com/news/2013-08-22/pentagon-weighs-firing-thousands-under-2014-spending-cuts.html>.

Commission on Wartime Contracting. (2009, September 21). *Defense agencies must improve their oversight of contractor business systems to reduce waste, fraud and abuse* (CWC Special Report 1). Retrieved from http://www.inthepublicinterest.org/sites/default/files/CWC_SR1_business-systems_2009-09-21.pdf.

Cornell University Law School. (n.d.) 10 USC § 1705, Department of Defense acquisition workforce development fund. Retrieved from <http://www.law.cornell.edu/uscode/text/10/1705>.

Defense Acquisition University (DAU). (2013). Certification standards and core plus development guide contracting level 1, 2, 3. Retrieved from <http://icatalog.dau.mil/onlinecatalog/CareerLvl.aspx#>.

Defense Acquisition Workforce Improvement Act (DAWIA). (n.d.). In *Wikipedia*. Retrieved July 19, 2013, from https://en.wikipedia.org/wiki/Wikipedia:Citing_Wikipedia.

Department of Defense, Inspector General. (2013a, June 10). *Semiannual report to the Congress* (October 1, 2012 to March 31, 2013). Retrieved from http://www.dodig.mil/pubs/sar_summary.cfm?id=5194.

Department of Defense. (2013b, April). Defense budget priorities and choices fiscal year 2014. Retrieved from <http://www.defense.gov/pubs/DefenseBudgetPrioritiesChoicesFiscalYear2014.pdf>.

Federal Acquisition Institute. (2013a). FAC-C certification requirements. Retrieved from <http://www.fai.gov/drupal/certification/fac-c-certification-requirements-table>.

Federal Acquisition Institute. (2013b, April 1). *FY 2011 annual report on the federal acquisition workforce*. Retrieved from <http://www.fai.gov/drupal/sites/default/files/pdfs/FY%202011%20Annual%20Report%20on%20the%20Federal%20Acquisition%20Workforce.pdf>.

Federal Acquisition Regulation, 48 C.F.R. ch.1,3 (2013).

Gansler, J. S., Berteau, D. J., Maddox, D.M., Oliver, D.R., Salomon, L.E., & Singley, G.T. (2007, October). *Urgent reform required: Army expeditionary contracting: Report of the Commission on Army Acquisition and Program Management in Expeditionary Operations*. Retrieved from http://www.army.mil/docs/Gansler_Commission_Report_Final_071031.pdf.

Government Accountability Office. (2008, January 23). *DoD's increased reliance on service contractors exacerbates long-standing challenges* (GAO-08-621T). Retrieved from <http://www.gao.gov/assets/120/119530.pdf>.

Government Accountability Office. (2011, April 15). *Contingency contracting: Observations on actions needed to address systemic challenges* (GAO-11-580). Retrieved from <http://www.gao.gov/assets/90/82428.pdf>.

Kelman, S. (1990). *Procurement and public management: The fear of discretion and the quality of government performance*. Lanham, MD: University Press of America.

Larner, R. (2011, August 30). Military spending waste: Up to \$60 billion in Iraq, Afghanistan war funds lost to poor planning, oversight, fraud. *Huffington Post*. Retrieved from http://www.huffingtonpost.com/2011/08/30/military-spending-waste_n_942723.html.

Legum, J. (2011, April 11). U.S. military spending has almost doubled since 2001. Retrieved from <http://thinkprogress.org/politics/2011/04/11/157596/military-spending-doubled-since-2001/?mobile=nc>.

Leon, D. (2013, July 10). 16.6 billion NASA budget clears house panel. Retrieved from <http://www.space.com/21922-nasa-budget-approved-house-panel.html>.

Office of Inspector General, Department of Defense. (n.d). Fraud, waste, and abuse defined. Retrieved from http://www.dodig.mil/resources/fraud/fraud_defined.html.

Office of Inspector General, National Aeronautics Space Administration. (2012, May 01). *NASA's effort to identify, report, and recapture improper payments* (IG-12-015). Retrieved from <http://oig.nasa.gov/audits/reports/FY12/IG-12-015.pdf>.

Office of Management and Budget. (2011, July). *Improving the way the government buys: Getting the best value for our taxpayer*. Retrieved from <http://www.whitehouse.gov/sites/default/files/omb/procurement/reports/improving-the-way-government-buys.pdf>.

Office of Management and Budget. (2006, January 20). *The federal acquisition certification in contracting program* [Memorandum]. Washington, DC: Author.

Rendon, R.G. (2008). Organizational assessments of procurement management processes. In *3rd International Public Procurement Conference Proceedings*. Retrieved from www.ippa.ws/IPPC3/Proceedings/Chaper%2045.pdf.

Rendon, R.G. (2010). Critical Success factors in government contract management. *Manuscript submitted for publication*. Retrieved from <http://www.ippa.org/IPPC4/Proceedings/19Others/Paper19-2.pdf>.

Special Inspector General for Iraq Reconstruction. (2006, July). *Iraq reconstruction: Lessons in contracting and procurement*. Retrieved from http://www.sigir.mil/files/lessonslearned/Lessons_Learned_July21.pdf#view=fit.

Schwartz, M., Church, J. (2013, May). *Department of defense's use of contractors to support military operations: Background, analysis, and issues for congress* (CRS Report No. R43074) Retrieved from Federation of American Scientists website: <http://www.fas.org/sgp/crs/natsec/R43074.pdf> .

Schooner, S. (2001). Fear of oversight: The fundamental failure of businesslike government. *American University Washington College of Law Rev.*, 50, 627. Retrieved from <http://www.wcl.american.edu/journal/lawrev/50/schoonerjci.pdf>.

Thibault, M. J., Shays, C. H., Ervin, C. K., Green, G. S., Henke, R. J., Schinasi, K. V., Zakheim, D. S. (2011, August). *Transforming wartime contracting: Controlling cost, reducing risks*. Retrieved from Commission on Wartime Contracting website: <http://cybercemetary.unt.edu/archive/cwc/20110929213815/http://www.wartimecontracting.gov/>

United States Northern Command. (n.d.). In *Wikipedia*. Retrieved August 23, 2013, from http://en.wikipedia.org/wiki/United_States_Northern_Command

Wilkins, D. B. (1996). How should we determine who should regulate lawyers-Managing conflict and content in professional regulation. *Fordham L. Rev.*, 65, 465. Retrieved from <http://ir.lawnet.fordham.edu/cgi/viewcontent.cgi?article=3303&context=flr>.

Yoder, C. (2013, summer). Frameworks for analyzing acquisition & contracting policy [Lecture notes]. Retrieved from <https://cle.nps.edu/xsl-portal/site/db1c1d20-b245-4507-9f9b-60ca9668d10e/page/b611a799-779f-4df0-867a-feb5b8f65dbe>.

THIS PAGE INTENTIONALLY LEFT BLANK

INITIAL DISTRIBUTION LIST

1. Defense Technical Information Center
Ft. Belvoir, Virginia
2. Dudley Knox Library
Naval Postgraduate School
Monterey, California